REMARKS

Claim 1 remains in the present application. Claims 2 - 23 have been cancelled. Based on the remarks herein, Applicant respectfully requests that the Examiner reconsider and withdraw all outstanding rejections.

Claim 1 was rejected under 35 U.S.C 102(b) as being anticipated by U.S. Patent No. 6,865,237 issued to Boariu, et al. (*Boariu*). For at least the reasons set forth below, Applicants submit that claim 1 is not anticipated by *Boariu*. Claim 1, as amended, recites:

> generating a rate-one, space-frequency code matrix from the received content for transmission via the plurality of three or more transmit antennae, wherein the plurality of three or more transmit antennae provide full space-frequency diversity of M*N*L, where M is number of transmit antenna, N is number of receiver antenna, L is order of frequency selective channel.

Applicants agree with the Office Action that *Boariu* fails to disclose full space-frequency diversity of M*N*L. See page 4.

Claim 23, which has been canceled and incorporate in to claim 1 was rejected as being unpatentable over *Boariu* in view of "Minimal Non-Orthogonality Rate 1 Space-Time Block Code for 3+ Tx Antennas" by Tirkkonen, et al. (*Tirkkonen*). The Office Action suggests that Boariu teaches that one can merely exchange space-time coding for space frequency coding. See page 4. However, this is technically inaccurate.

As stated previously, Claim 1 recites "generating a rate-one, ***space-frequency code*** matrix from the received content for transmission via the plurality of three or more transmit antennae…" *Tirkkonen* is directed to use of ***space-time*** block codes. See, for example, Absract, Section II.

Further, traditional mapping of space-time codes to space-frequency codes require trading diversity for coding gain.[1] That is, full diversity with three or more transmit antenna

[1] http://www.mk.tu-berlin.de/mitarbeiter/tub/lehrbeauftragte/intro_stc-sfc-coding

cannot be achieved via these simple, traditional mappings. See, for example, Paragraph 0005 of the Specification as originally filed.

Boariu only uses the term "space-frequency" twice:

> Correspondingly, the invention can be applied to a system in which different frequencies or different spreading codes are used instead of time slots. In this case it does not naturally deal with space-time coding but rather with ***space-frequency*** coding or space-code-division coding. The ***space-frequency*** coding could be used in an OFDM (orthogonal frequency division multiplexing) system, for example.

See col. 12, lines 43-50 (emphasis added). In this passage, *Boariu* states that the invention as described by *Boariu* may be applicable to space-frequency coding as well. ***The passage does not state that space-time coding and space-frequency coding are interchangeable*** as asserted in the Office Action. Therefore, *Boariu* and *Tirkkonen* alone or in combination cannot teach or suggest the invention as recited in claim 1.

For at least the foregoing reasons, Applicants submit that the rejections have been overcome. Therefore, claim 1 is in condition for allowance and such action is earnestly solicited. The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application. Please charge any shortages and credit any overcharges to our Deposit Account number 02-2666.

Respectfully submitted,
BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN, LLP

Date: September 24, 2008

/Paul A. Mendonsa/
Paul A. Mendonsa
Reg. No. 42,879

12400 Wilshire Boulevard
Seventh Floor
Los Angeles, CA 90025-1026
(503) 439-8778